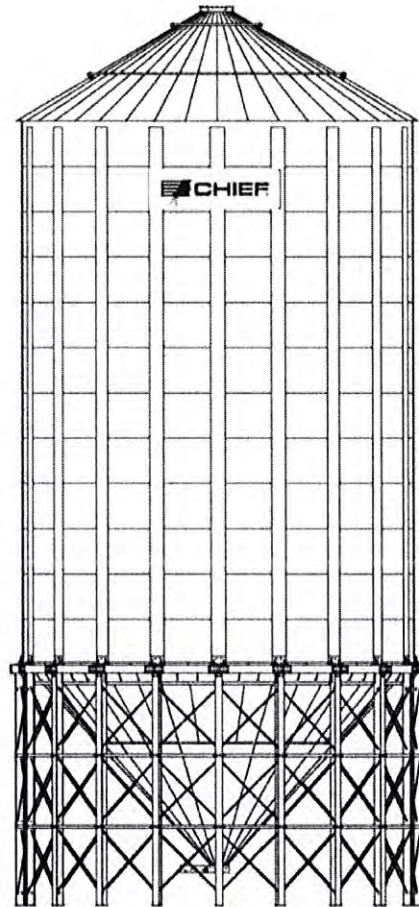




CHIEF INDUSTRIES, INC.
AGRI/INDUSTRIAL DIVISION



**CHT10
COMMERCIAL HOPPER TANK
42" SHEET
ERECTION MANUAL**

01-10-13

340671 - MANUAL CHIEF42 CHT10 TITAN

Manual Revisions

	<i>Date:</i>	<i>Revision Made</i>
#340671	01-06-09	Changed Roof to 30 degree
#340671	05-12-09	Changed temperature support kits
#340671	11-17-09	Changed Hopper Flashing
#340671	09-01-10	Changed base angle to leg out.

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CHIEF INDUSTRIES, INC.
AGRI/INDUSTRIAL DIVISION
STANDARD LIMITED
GRAIN BIN WARRANTY

1. WHAT IS COVERED BY THIS STANDARD LIMITED WARRANTY

If you are the original retail purchaser of Chief Manufactured Grain Bins, which includes Bulk Feed Bins and Hopper Tanks, Chief Industries, Inc., expressly warrants to you that the components manufactured by Chief Industries, Inc., were, on the date of delivery to you, free from defects in the composition of material, Chief workmanship, and design.

2. DURATION OF THIS STANDARD LIMITED WARRANTY AND NOTICE REQUIREMENTS

This Standard Limited Warranty is applicable under normal use and service to defects which become evident within a period of five (5) years from date of delivery of your Chief Grain Bin to you and which are reported in writing to Chief Industries within 30 days of discovery of the defect. In any event, Chief's obligations under this Standard Limited Warranty shall expire sixty-one (61) months from the invoice date.

In order to obtain warranty service, simply contact Chief Industries in writing with the following information: (1) Your name; (2) Location of the product; (3) Dealer name; (4) Description of problem; (5) Any pertinent information; (6) Date of purchase. No claim will be processed until all of this information has been received in writing by Chief Industries. For warranty service, contact Chief Industries, Inc., Agri/Industrial Division, Customer Service Department, P. O. Box 848, Kearney, NE 68848.

3. CHIEF'S OBLIGATIONS

By purchasing your Chief Grain Bin subject to this Standard Limited Warranty, you and Chief Industries expressly agree to an allocation of the risks of product failure between you and Chief Industries. This allocation is recognized by both parties and is reflected in the price of the Chief Grain Bin.

4. REMEDIES AVAILABLE FROM CHIEF

If a defect in your Chief Grain Bin is covered by this standard limited warranty, Chief Industries will supply replacement parts F.O.B. Chief Industries, Kearney, Nebraska. In addition, during the first year of the warranty, Chief Industries will supply labor necessary to make repairs in your Chief Grain Bin made necessary by such defect or faults. Chief Industries will request at least two competitive bids for labor, as shall in the judgement of Chief Industries be the most appropriate remedy for the failure covered by this warranty. Of course, Chief Industries reserves the right to reject all such bids and to obtain additional bids. Upon acceptance of a bid by Chief Industries, Chief Industries will authorize the necessary repair.

5. REMEDIES NOT AVAILABLE FROM CHIEF

The obligations stated in the preceding paragraph are the SOLE AND EXCLUSIVE REMEDIES available from Chief Industries in the event of problems with your Chief Grain Bin. Chief Industries will not be liable for the costs of dismantling defective parts or installing replacement parts, including labor costs, after the first year, and Chief Industries will not be liable for any special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict tort, or any other legal theory.

6. WHAT IS NOT COVERED BY THIS STANDARD LIMITED WARRANTY

This Standard Limited Warranty does not cover:

- (a) Chief manufactured product not sold as part of the grain bin.
- (b) Products, components, equipment, accessories, or parts manufactured by someone other than Chief Industries.
- (c) Accessories, Temporary Grain Storage Bins or Bins designed for storage of products other than whole grain storage.
- (d) Damage or loss during shipment of the Chief Grain Bins.
- (e) Damage or loss caused by the acts or omissions of the erector or his agents.

6. WHAT IS NOT COVERED BY THIS STANDARD LIMITED WARRANTY (continued)

- (f) Damage or loss caused, in whole or in part, by inadequate or improper site selection, inadequate or improper site preparation, inadequate or improper foundation, or any other failure to provide a suitable erection or installation environment for or a suitable erection or installation of the Chief Grain Bin, or of any product, component, equipment, accessories, parts used in conjunction with the Chief Grain Bin.
- (g) Damage or loss caused, in whole or in part, by use of the Chief Grain Bin for purposes other than those for which it was designed.
- (h) Damage or loss caused, in whole or in part, by unauthorized attachments, modifications, or alterations of the Chief Grain Bin.
- (i) Damage or loss caused, in whole or in part, by improper or inadequate maintenance, misuse, or abuse of the Chief Grain Bin.

7. NO OTHER WARRANTIES

(1) Complete and Exclusive Agreement: THIS AGREEMENT IS THE COMPLETE AND EXCLUSIVE AGREEMENT BETWEEN YOU AND CHIEF INDUSTRIES, INC., CONCERNING THE ALLOCATION OF THE RISKS OF DAMAGE OR LOSS ARISING FROM MANUFACTURED COMPONENT FAILURE. It supersedes all prior agreements, whether written or oral, and all other communications between you and Chief concerning the allocation of those risks. No employee of Chief Industries, Inc., or any other person, including Authorized Dealers and any other person authorized to sell Chief Grain Bins, has any authority to make any representations, promises, or warranties in addition to those contained herein.

(2) THIS STANDARD LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

8. ALLOCATION OF RISKS

THIS AGREEMENT ALLOCATES THE RISKS OF DAMAGE OR LOSS ARISING FROM PRODUCT FAILURE BETWEEN CHIEF INDUSTRIES, INC., AND PURCHASER. THIS ALLOCATION IS RECOGNIZED BY BOTH PARTIES AND WAS REFLECTED IN THE PURCHASE PRICE OF THE GOODS.

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(PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.)



WATER SENSITIVE MATERIALS

WARNING
READ THIS NOTICE CAREFULLY

**BUNDLES MUST BE INSPECTED AND CARRIER
ADVISED IMMEDIATELY IF DAMAGE IS NOTED.
WHITE RUST WILL ATTACK PAINTED
AS WELL AS GALVANIZED SHEETING.**

If water has entered a bundle or if condensation has formed between sheets the bundle must be opened, sheets separated and surfaces dried.

IF SHEETS ARE TO BE ERECTED WITHIN TEN (10) DAYS

Store bundled sheets off the ground high enough to allow air circulation beneath bundle and to prevent water from entering. Store one end at least 8" higher than the other. Support long bundles in center. Prevent rain from entering bundle by covering with tarpaulin making provision for air circulation between draped edges and ground. DO NOT wrap in plastic.

IF SHEETS ARE NOT TO BE ERECTED WITHIN TEN (10) DAYS

Provide inside dry storage. Storage beyond six (6) months is not recommended. If white rust is apparent upon receipt of shipment, notify sales office immediately.

Damage to sheets, resulting from improper storage, will be the responsibility of the receiver.

Section 1 – Grain Bin Specifications

WARRANTY

The Manufacturer warrants only that its products are free from defects in materials and workmanship on the date of shipment from its plant. THE MANUFACTURER'S OBLIGATION UNDER THIS WARRANTY SHALL BE LIMITED TO REPAIRING OR REPLACING (BUT NOT DISMANTLING AND INSTALLING) SUCH PRODUCTS WHICH PROVE TO BE THUS DEFECTIVE. Any products so repaired or replaced as provided herein shall be subject to warranty only for the remainder of the time applicable to the original warranty period.

The Manufacturer shall determine whether correction of any defect or failure under this warranty shall be by repair or replacement. The Manufacturer's liability shall not arise unless repairs are made under the supervision of, or with written approval of the Manufacturer. Shipping costs incurred in returning defective material shall be paid by the Manufacturer, but only if such shipment is authorized in writing by the Manufacturer. If the Manufacturer's examination proves the product to be defective as herein defined, return shipment shall be prepaid by the Manufacturer, otherwise, return shipment shall be freight collect to the consignee. Title to any replaced materials shall pass to the Manufacturer. This warranty does not cover products, accessories, parts or attachments which are not made by the Manufacturer, except to the extent of the warranty given by the bin manufacturer by the actual manufacturer. All claims filed under the provisions of this warranty must be presented to the manufacturer in writing during the warranty period and not more than thirty (30) days after detection of any apparent defect.

This warranty is extended to the original owner of the products purchased hereunder and is non-transferable and non-assignable.

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTENDS BEYOND THE DESCRIPTION STATED HEREIN, INCLUDING ANY WARRANTIES OR MERCHANTABILITY, AND THE MANUFACTURER SHALL NOT BE RESPONSIBLE FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGE (SUCH AS DAMAGE TO THE CONTENT OF ANY HOPPER TANK) OR ANY LOSS OF ANY KIND WHATSOEVER.

Motors purchased from bin manufacturer are warranted by their manufacturer and warranty claims must be directed to their authorized service agency. We have provided a listing of these agencies in the Product Manual. Motor warranty claims directed to the bin Manufacturer will be returned with a reminder of this requirement.

PRODUCT END USE

The end use of this Hopper tank is for the storage of free-flowing grain of up to 52lbs. Per cubic foot density (soybean meal, meatscraps and many other materials are not free flowing and should not be stored in any of these tanks). It is not to be used for any other bulk storage or for any liquid storage. TO DO SO WILL VOID THE WARRANTY!

PRODUCT CHANGES

The manufacturer reserves the right to make changes in specification, construction, or design of products at any time in such manner as it may consider necessary or advisable and to discontinue the manufacturer and sale of any products all without prior notice.

HOPPER TANK CAPACITIES

Hopper tank Bushel capacities are based on 1.250 cubic foot per bushel and a 6% compaction factor. Level bushel capacity is based on a fill to the sidewall height of the hopper tank. Maximum bushel capacity is based on fill to the sidewall height of the hopper tank and peaked into the roof area at 24° degree angle.

Cubic foot capacity is based on a fill to the eave height of the Hopper Tank and peaked into the roof at 24° degree angle without a compaction factor. The tonnage capacity is based on the cubic foot capacity and a bulk density of 56 pounds per cubic foot.

CAUTIONS

1. Install suffocation warning decals in a prominent location near each service opening. Normally this is the crawl door and the roof manhole opening at the eave and peak. Three of these decals are included with the hardware box.
2. Foundation must be dead level. An out of level foundation can cause increased stresses on the hopper tank, possibly cause a structural failure and will void the warranty.
3. The galvanized panels leave our plant in prime condition. Store them off the floor in a heated room if possible. If stored outside, place panels end down off of the ground. Store panels on edge or on end allowing ¼" of air space between panels if you are unsure as to whether or not moisture is present. Exposure to trapped moisture can cause white rust, which will void the warranty.
4. Follow the recommendations listed below or damage to the hopper tank is possible and will void the warranty.
 - a. Do not allow grain to freeze in tank. High moisture grain will expand causing greatly increased wall loads
 - b. Do not allow excessive snow and ice to accumulate on any portion of the hopper tank roof.

Do not store grain against the roof due to the possibility of structural failure and the probability of grain spoilage due to contact with condensation and lack of air movement.

1. GENERAL DESIGN INFORMATION

- a) All Chief Industries grain bins are designed for storage and handling of 49.5 PCF (793 kg/m³) free flowing grain (52.5 PCF (841 kg/m³) compacted grain @ 6%). Grain fill level shall not exceed 1" (25.4 mm) down from eave.
- b) Storage of products other than grain (products heavier than 49.5 PCF (793 kg/m³), products having unusual flow characteristics or unusual corrosive properties) must be approved by Chief Industries' Engineering Department prior to quoting. Storage of soybean meal or meal scraps or other non-flowing products in standard tanks will void the warranty.
- c) Each individual sidewall ring has been designed to accommodate the vertical and horizontal wall loads imposed by the stored grain. Sheeting gauge and design strength for each ring is individually analyzed for all bin sizes. Also, stiffener gauges and design strengths are individually determined for each bin's full sidewall height range. All steel materials are purchased in accordance with the applicable ASTM Standard.
- d) All bolted connections are designed using high strength bolts which meet the specifications of the applicable ASTM or SAE Standards.
- e) All bins must be filled uniformly at the center and unloaded through the center discharge only, until grain no longer flows by gravity. Bins filled or emptied off-center will void the warranty; except approved sidedraw systems. (Refer to Section 5c for Sidedraw Usage)
- f) All Galvanized Steel used for storage and drying bins conform to ASTM specification A653 and the Galvanized coating to A924, TYPE G-115; 1.15 oz/ft.² (350; 350 gm/m²) total for both sides as follows:

22 Ga. Thickness & lighter = CS TYPE A, 33ksi min yield (grade 230)

18 & 20 Ga Thickness = SS Grade 40, Class I; 40ksi min yield (grade 275)

17 Ga. Thickness & heavier = SS Grade 55, Class I; 55ksi min yield (grade 340)

(Please note: SS = Structural Steel)